WHAT IS CLAIMED IS:

1. A method of anticipating a stable operating range for an inkjet printhead, comprising:

calculating a thickness and an area of an inkjet heater in said inkjet printhead; and

predicting a stable ink jetting energy range for said heater based upon said thickness and area.

2. The method of claim 1, further including firing said inkjet heater at said energy range.

3. The method of claim 1 , wherein said providing further includes providing a heater width and heater length.

4. The method of claim 3, wherein said calculating further includes providing a sheet resistance of a resistor layer of said inkjet heater.

5. The method of claim 4, wherein said calculating further includes providing a desired current pulse for firing said inkjet heater having a pulse duration in time and a current in amperes.

6. The method of claim 5, wherein said calculating further includes providing a desired power per unit volume condition.

7. The method of claim 6, wherein said calculating further includes evaluating a heater energy per unit volume function expressed as $[R_{sheet}/[(WH^2)(TH)]] \int^2 dt$ where the integral is evaluated from 0 to said pulse

duration, said R_{sheet} being said sheet resistance, said WH being said heater width, said TH being said thickness, and said i being a square root of ([(said desired power per unit volume)(WH^2)(TH)]/R_{sheet}).

8. A method of stably operating an inkjet printhead comprising:

calculating a thickness and area of an inkjet heater in said inkjet printhead;

predicting a stable ink jetting energy range for said heater based upon said thickness and area; and

firing said inkjet heater at said energy range.

9. The method of claim 8, wherein said firing further includes firing said inkjet heater in an energy range from about 0.007 to about 1.19 microjoules.

10. The method of claim 8, wherein said calculating said thickness includes figuring a thickness of a resistor layer of said inkjet heater and a thickness of an overcoat layer above said resistor layer.

11. The method of claim 10, wherein said figuring said thickness of said overcoat layer further includes figuring a thickness of a passivation layer and a cavitation layer above said resistor layer.

12. The method of claim 8, wherein said calculating said area includes multiplying a heater width by a heater length of said inkjet heater.

13. A method of predetermining a stable operating range of an inkjet heater, comprising: based upon a thickness and area of said inkjet heater, predicting a stable ink jetting energy range for said inkjet heater.

14. The method of claim 13, further including calculating said thickness and area.

15. A method of producing a stable operating inkjet printhead, comprising:

selecting a desired stable ink jetting energy range; and

forming an inkjet heater having a thickness and area corresponding to said desired stable ink jetting energy range.

16. The method of claim 15, wherein said forming said inkjet heater includes depositing pluralities of thin film layers on a substrate, said inkjet heater having said thickness comprised of a thickness of an overcoat layer and a resistor layer from said plurality of thin film layers and said inkjet heater having said area corresponding to a heater width multiplied by a heater length.

17. The method of claim 15, wherein said selecting further includes making a selection for a heater area in a range from about 50 to about 500 micrometers squared and a heater thickness in a range from about 500 to about 6000 angstroms.

18. The method of claim 15, wherein said selecting further includes making a selection in an energy range from about 0.007 to about 0.83 microjoules.

19. The method of claim 15, wherein said selecting further includes making a selection in an energy range from about 0.007 to about 1.19 microjoules.

20. The method of claim 15, further including firing said inkjet heater at said desired stable ink jetting energy range.